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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/944,823      | 08/31/2001  | Bernd Borchert       | 32226.12            | 3378             |

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EXAMINER

FLORES RUIZ, DELMA R

ART UNIT PAPER NUMBER

2828

DATE MAILED: 04/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/944,823

Applicant(s)

BORCHERT, BERND

Examiner

Delma R. Flores Ruiz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 8/31/2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 5, and 9 - 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Lear (5,633,527).

***Regarding claims 1, 2, 5, 9, and 11*** Lear discloses a semiconductor laser chip having a semiconductor laser element (see Fig. 1, Character 10) and a beam shaper (see Figs. 1 Character 14) integrated into the semiconductor laser chip and serving to shape a laser beam emitted by the semiconductor laser element, the beam shaper being arranged in a manner integrated in the semiconductor laser element in the exit direction (see Fig. 1, Character 22) of a laser beam emitted by the semiconductor laser element, such that the emitted laser beam is guided through the beam shaper (see Figs. 1 – 9, Abstract, Column 6, Lines 61 – 68, Column 7, Lines 1 – 12, Column 8, Lines 56 – 68, Column 9, Lines 1 – 68, Column 10, Lines 23 – 40, 61 – 68, Column 11, Lines 1 –

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11, and Column 14, Lines 16 - 29). The beam shaper is monolithically integrated in the semiconductor laser chip, (see Figs. 1 - 9). The trench is introduced between the semiconductor laser element and the beam shaper (see Fig. 1 Character 32, Column 8, Lines 15 - 68, Column 9, Lines 1 - 20 and Column 10, Lines 23 - 40).

**Regarding claims 3, 4, and 10**, Lear discloses the beam shaper has containing-containing material, the beam shaper has at least one material combination selected from the group consisting of indium gallium aluminum antimonide, gallium aluminum arsenide antimonide and indium aluminum arsenide antimonide (Column 6, Lines 1 - 9, 52 - 60).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lear (5,633,527) in view of Hargis et al (5,802,086).

**Regarding claim 6,** Lear discloses the claimed invention except for the trench has width of at most 15  $\mu\text{m}$  between the edge of the semiconductor laser element from which the laser beam is emitted and the beam input end surface of the beam shaper. It would have been obvious at the time of applicant's invention, to combine Hargis of teaching a the trench has width of at most 15  $\mu\text{m}$  between the edge of the semiconductor laser element from which the laser beam is emitted and the beam input end surface of the beam shaper with semiconductor laser chip because it would have been obvious to one of ordinary skill in the art at the time the invention was made to the trench has width of at most 15  $\mu\text{m}$  between the edge of the semiconductor laser element from which the laser beam is emitted and the beam input end surface of the beam shaper, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lear (5,633,527) in view of Shigehara et al (5,771,250).

**Regarding claim 7 and 8,** Ono discloses the claimed invention except for semiconductor laser element is configured as a DFB and FP semiconductor laser element. It would have been obvious at the time of applicant's invention, to combine Shigehara of teaching a semiconductor laser element is configured as a DFB and FP

semiconductor laser element with semiconductor laser chip because the semiconductor light-emitting device (Fabry-Perot and DFB type semiconductor laser) which has been conventionally used as inspection light source for semiconductor laser apparatus.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delma R. Flores Ruiz whose telephone number is (703) 308-6238. The examiner can normally be reached on M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.



Delma R. Flores Ruiz

Examiner

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DRFR/PI

April 15, 2003



QUYEN LEUNG  
PRIMARY EXAMINER



Paul Ip

Supervisor Patent Examiner

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